UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

EX PARTE HOPEN ET AL.

U.S. PATENT APPLICATION NUMBER 10/733,808

FILING DATE: DECEMBER 10, 2003

REPLY BRIEF

CARR & FERRELL *LLP*
2200 GENG ROAD
PALO ALTO, CA 94303
T: 650.812.3400
F: 650.812.3444

ATTORNEY FOR THE APPELLANTS
AND REAL-PARTY-IN-INTEREST

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ARGUMENT
(37 C.F.R. § 41.37(c)(1)(vii))

I. THE COMBINATION OF *O'NEIL* AND *WILDING* FAILS TO DISCLOSE EACH AND EVERY ELEMENT OF THE INDEPENDENT CLAIMS

The United States Court of Appeals for the Federal Circuit has held since its landmark decision in *Phillips v. AWH Corporation* that claims be considered contextually and as a whole. 415 F.3d 1303, 1313 (Fed. Cir. 2005); *see also ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed.Cir.2003) ("the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms"). When read in context and as a whole, the independent claims refer to a particular 'load balancing' that is specifically based on whether a platform service is 'running, not running, or starting.' The context makes it clear that the independent claims do not merely recite 'load balancing' or even 'load balancing based on working status of a platform service.' The claims recite that **'load balancing' is based on whether the platform service is 'running, not running, or starting.'**

With respect to the *O'Neil* reference (U.S. patent number 6,128,279), the Examiner expressly admits that *O'Neil* "does not explicitly teach of a working status indicating that the at least one platform service is running, not running, or starting." *May 27, 2009 Office Action*, 3 ¶ 7. If *O'Neil* does not disclose the claimed 'running, not running, or starting' status of a platform service, *O'Neil* therefore cannot disclose that 'load balancing' is based on whether the platform service is 'running, not running, or starting.' Despite the Examiner's earlier admission, the Examiner continues to rely on *O'Neil* to disclose load balancing, albeit load balancing based on factors other than and unrelated to whether the platform service is 'running, not running,' or starting.' *Examiner's Answer*, 16-17.

The portions of *O'Neil* cited by the Examiner are provided below in full:

> Step **S203** decides if the load currently being processed in server **7** exceeds a first predetermined level. In preferred embodiments of the invention, this predetermined level is 50%, meaning that server **7** is operating at 50% capacity. Of course, the invention is not limited to using 50% as the first predetermined level. In this regard, a value for the first

6:21-26.

> determines that server **7** is processing a load that exceeds the first predetermined level, flow proceeds to step **S205**.

6:34-36.

> Next, step **S208** analyzes load information from on-line servers in order to determine which of the on-line servers is processing the smallest load. Step **S208** does this by comparing the various loads being processed by other servers **9** and **10** (assuming that both are on-line). Step **S209** then routes the network request to the server which is currently processing the smallest load. In the invention, routing is performed by sending a command from load balancing module **17** to a requestor instructing the requestor to send the request to a designated server. Thus, re-routing is processed automatically by the requestor software and is virtually invisible to the actual Internet user.

7:20-31.

> Step **S207** determines which, if any, of the servers at Web site **1** are off-line based, e.g., on the load information exchange (or lack thereof) in step **S205**. A server may be off-line for a number of reasons. For example, the server may be powered-down, malfunctioning, etc. In such cases, the servers' load balancing modules may be unable to respond to a request from load balancing module **17** or otherwise be unable to participate in an exchange of information, thereby indicating that those servers are off-line. In addition, in preferred embodiments of the invention,

7:4-13.

While the first three cited portions of *O'Neil* refer to a status of the server (*i.e.*, "predetermined level," "capacity," "smallest load"), none of the three teaches the specifically claimed status of a platform service as 'running, not running, or starting.' The final cited portion of *O'Neil* refers only to the "off-line" status of the server. A server is not the same as a platform service, and even if a server were the same as a platform service (and Applicants submit that it is not), finding a server with a predetermined capacity, load, or "off-line" does not teach that a platform service is 'running, not running, or starting.' As such, the Applicants believe that *O'Neil* fails to

teach the claimed load balancing based on whether a platform service is running, not running, or starting.

With respect to the *Wilding* reference (U.S. patent application number 2003/0212788), the Examiner refers to teachings regarding "status of a service" as being "alive and operable." *Examiner's Answer*, 17 (referring to *Wilding*, [0035]-[0036]). The Examiner admits, however, while *Wilding* discloses "performing an action based on the working status," such "action is not specifically load balancing." *Examiner's Answer*, 17. If *Wilding* does not disclose any 'load balancing,' *Wilding* therefore cannot disclose the claimed 'load balancing' based on whether the platform service is 'running, not running, or starting.'

In short, the Examiner relies on *O'Neil* to teach load balancing based on whether a server is at predetermined level capacity, has the smallest load, or off-line. The Examiner further relies on *Wilding* to teach that a status of a service may include running or not running. The Examiner then concludes that because both *O'Neil* and *Wilding* refer generally to "status" that the two references can simply be combined in the manner claimed. The "status" of *O'Neil*, however, specifically refers to the capacity, load size, and off-line status of a server, not the claimed 'running, not running, or starting' of a platform service. As such, the combination of *O'Neil* and *Wilding* would not result in the claimed load balancing based on 'running, not running, or starting' of a platform service.

"Proper claim construction . . . demands interpretation of the **entire claim in context, not a single element in isolation**." *Pause Technology LLC v. Tivo Inc.*, 419 F.3d 1326, 1331 (Fed. Cir. 2005) (emphasis added). The Examiner does not consider the entire claim in context, but only isolated elements of the same, in failing to consider that the claimed 'load balancing' occurs with respect to whether the platform service is 'running, not running, or starting.' Failure to base load balancing on whether the platform service is

'running, not running, or starting' is a failure to disclose the particular context of the independent claims. As such, the rejection runs contrary to the MPEP's admonition that individual claim terms not be cherry-picked or read in isolation. *See* MPEP § 2141.02. Such distillation of claim language is improper and "disregards the statutory requirement that the invention be viewed 'as a whole.'" *Jones v. Hardy*, 727 F.2d 1524, 1530 (Fed. Cir. 1984).

A *prima facie* case of obviousness requires a finding that **all** the claimed elements were known in the prior art and that one skilled in the art would have combined those elements. See *KSR v. Teleflex*, 127 S.Ct. 1727, 1739 (2007); see also MPEP § 2143. When viewed and considered as a whole, the claimed invention clearly requires that 'load balancing' be based on 'working status' of 'running, not running, or starting,' which is not disclosed in *O'Neil* or *Wilding*, individually or in combination.

II. LACK OF MOTIVATION TO COMBINE *O'NEIL* AND *WILDING*

In response to the Applicants' assertion that the Examiner has used impermissible hindsight, the Examiner attempts to justify his use of hindsight by referring to the 1971 case of *In re McLaughlin*. *Examiner's Answer*, 18 (citing *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971)). *McLaughlin*, however, merely echoes the long-standing rule that a reconstruction, because it necessarily occurs in hindsight, must nevertheless "take[] into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and **does not include knowledge gleaned only from applicant's disclosure**." *McLaughlin*, 443 F.2d at 1395 (emphasis added).

Since the *McLaughlin* decision of 1971, the Federal Circuit has repeatedly and unequivocally stated that "references must be viewed without the benefit of hindsight vision." *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5 (Fed. Cir. 1986). "[S]imply tak[ing] the inventor's disclosure as a blueprint for piecing together the prior art to

defeat patentability [is] the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (further warning against "the tempting but forbidden zone of hindsight," "the insidious effect of a hindsight syndrome," and "the hindsight trap"). The Supreme Court similarly cautioned against the "risk of courts and patent examiners falling prey to hindsight bias" and the "distortion caused by hindsight bias." *KSR*, 127 S.Ct. at 1742-43. Following *KSR*, the Federal Circuit further articulated that the requisite motivation underlying a conclusion of obviousness is a "motivation to combine particular references to reach the particular claimed method." *Innogenetics, NV v. Abbott Laboratories*, 512 F.3d 1363, 1373-74 n. 3 (Fed. Cir. 2008) (noting further that "[w]e must still be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention").

None of the purported motivations cited by the Examiner explains "how or why the references would be combined to produce the claimed invention." For example, the Examiner claims that "[t]here are other reasons for combining the references. For instance, *O'Neil* also teaches that various changes and modifications made [sic] be made without departing from the spirit and scope of the claimed Invention." *Examiner's Answer*, 18. Mere acknowledgement that "changes and modifications" are possible (which is true of nearly all inventions) does not explain how or why a person would be motivated to combine *O'Neil* with *Wilding* specifically to produce the claimed invention. Further, the mere fact that references **can** be combined or modified does not render the resultant combination obvious. See *KSR*, 127 S.Ct. at 1741.

The Examiner goes on to argue that "[i]t would have been obvious to one of ordinary skill to combine teachings from similar inventions that monitor for working status of a service (presumably referring to *Wilding*) and perform load balancing based on other types of known working statuses that are monitored in order to service requests (presumably referring to *O'Neil*)." *Examiner's Answer*, 18. Such a statement is, however,

merely a restatement of the combination and does not provide an objective motivation to combine the particular references to reach the particular claimed invention.

The Examiner finally asserts that *Wilding* "would improve *O'Neil*'s teachings by enabling corrective measures to taken [sic] based on the status and ensure high availability of service." *Examiner's Answer*, 19. The Examiner appears to disregard that *O'Neil* already teaches corrective measures based on status. *O'Neil* teaches, for example, that "load balancing was developed to address the [] problems" that arise "if one server becomes overloaded with requests" and "in order to ensure that any one server does not become unduly burdened." *O'Neil*, 1:20-30. As such, load balancing is a corrective measure taken based on the "overloaded" status of a server to ensure availability of the server. A person of ordinary skill in the art would therefore not be motivated to combine *O'Neil* with *Wilding* (or any other reference) to enable a feature that is already present in *O'Neil*.

The Applicants respectfully submit that the Examiner has used impermissible hindsight by using the claimed invention as a blueprint for the proposed combination, since person of ordinary skill in the art looking to improve upon *O'Neil*'s "System for Balancing Load among Network Servers" would not look to incorporate *Wilding*, a reference that has nothing to do with balancing load.

CONCLUSION AND REQUESTED RELIEF

Because both *O'Neil* and *Wilding* fail to teach the claimed 'load balancing' based on whether the platform service is 'running, not running, and starting,' *O'Neil* and *Wilding* therefore fail to teach each and every claim limitation of the independent claims. There is also no motivation to combine the particular references to reach the claimed invention. Any claim dependent upon the aforementioned independent claims —either directly or via an intermediate dependent claim—is allowable for at least the same reasons as the independent claim from which it depends. As such, each and every one of the dependent claims of the present application are also in condition for allowance. For at least these reasons, the Examiner's rejection should be withdrawn.

Respectfully submitted,
Chris A. Hopen et al.

March 19, 2010

By: /Tam Thanh Pham/

Tam Thanh Pham (Reg. No. 50,565)
CARR & FERRELL *LLP*
2200 Geng Road
Palo Alto, CA 94303
T: 650.812.3400
F: 650.812.3444

ATTORNEY FOR THE APPELLANT
AND REAL-PARTY-IN-INTEREST